

REMARKS

Reconsideration of the application is requested.

Claims 1-21 are now in the application. Claims 1-21 are subject to examination. Claims 1 and 13-19 have been amended. Claims 20-21 have been added.

In items 1 and 2 on page 2 of the above-identified Office Action, the Examiner objected to the abstract. The abstract has been amended to remove the term "disclosed". A clean sheet version of the abstract is also enclosed.

Under the heading "Claim Rejections - 35 USC § 101" on page 2 of the above-identified Office Action, claims 13-19 have been rejected as non-statutory subject matter. Claims 13-19 have been amended to be "Beauregard" formatted claims and are proper statutory subject matter. The Examiner is kindly invited to see In re Beauregard, 35 USPQ2d 1838 (Fed. Cir. 1995) regarding the appropriateness of such claims.

Under the heading "Claim Rejections - 35 USC § 102" on pages 2-3 of the above-identified Office Action, claims 1-2 and 13-14 have been rejected as being fully anticipated by U.S. Patent No. 6,438,492 to Le Tallec et al. (hereinafter Le Tallec) under 35 U.S.C. § 102.

Le Tallec teaches a measuring device for ascertaining a position and velocity vector of an aircraft. The measuring device is installed on the aircraft and has a radio transceiver for transmitting the position and velocity vectors to other aircraft and at the same time to receive such information from the other aircraft. The received information from the other aircraft is analyzed for determining if the present course of the aircraft is on a potential collision course with any of the other aircraft. An alert signal is generated if it is determined that a possible collision has been identified. In essence, Le Tallec teaches a compact collision protection system to be installed on board the aircraft, preferably gliders. The system relies on its own positional data and the positional data provided from the other aircraft.

The rejection has been noted and claims 1 and 13 have been amended in an effort to even more clearly define the invention of the instant application. More specifically, claims 1 and 13 have been amended to recite that the data is "transmitted from an aircraft to a ground station and the data being only derived from systems on board the aircraft". Support for the changes is found on page 37, lines 8-17 of the specification of the instant application.

As Le Tallec teaches aircraft to aircraft data transmission and no use of a ground station, Le Tallec is believed to have been overcome. In addition, the invention of the instant application does not require data input from other aircraft as is necessary in Le Tallec.

In item 8 on pages 3 and 4 of the above-identified Office Action, claims 3-5 and 15-17 have been rejected as being obvious over Le Tallec in view of U.S. Patent No. 5,200,901 to Gerstenfeld et al. (hereinafter Gerstenfeld) under 35 U.S.C. § 103.

Gerstenfeld teaches collecting ground based air traffic controller radar data and voice transmission data between controllers located at particular sites and pilots flying aircraft. The information is synchronized and real air traffic scenarios are developed in a simulator for use in air traffic control training systems. A comparison module constantly monitors the information generated by the simulator for comparing a present state of the scenario to determine if a rule or procedure stored in a knowledge base is violated or if the trainee demonstrates poor technique (see column 7) in handling the scenario. In addition, the trainee's response or technique can be compared to either

that of an expert running the same simulation or that of the actual ground controller who assisted in the actual matter. Of course, the simulator can now also manipulate the data to create different situational or if-then-else scenarios and await the trainee's input and further manipulate the data.

The Examiner states that Le Tallec does not teach the steps of extracting scenarios for assessing a risk of an aircraft operation. The Examiner further states that it is obvious to one skilled in the art to modify the aircraft security system taught in Le Tallec with the features from the aircraft traffic analysis and training taught in Gerstenfeld because such modification provides the ability to use or employ difference event scenarios in order to minimize risk and accidents, thereby improving safety.

First, it is noted that the Gerstenfeld teaches using three types of data, radar data, communications data and timing data. The radar data comes from a ground based traffic controller radar unit monitoring the flight of the aircraft. In contrast, amended claims 1 and 13 of the instant application recite that only aircraft provided data is used in the analysis and therefore the most critical data from Gerstenfeld, radar data, is not used. The only aircraft

provided data in Gerstenfeld is the voice data which is useless without the radar data.

Second, the combination recited by the Examiner is respectfully believed to be illogical. Why would we equip aircraft with equipment for training ground controllers. Le Tallec is concerned with collision avoidance. Gerstenfeld is concerned with teaching ground controllers to be more effective. Le Tallec clearly teaches away from using displays in critical situations as this is time consuming and dangerous for the aircrew. In addition, the Le Tallec taught invention is installed on aircrafts as must be the combination recited by the Examiner or else this totally destroys the purpose of the Le Tallec taught invention (e.g. an on aircraft collision avoidance system). The Examiner's proposed modification cannot change the principle operation of the primary reference (see MPEP 2143.01). Furthermore, the addition of the Gerstenfeld is not a modification to Le Tallec, it is a separate stand alone additional apparatus.

In item 9 on pages 4 and 5 of the above-identified Office Action, claims 6-10 and 18-19 have been rejected as being obvious over Le Tallec in view of U.S. Patent No. 6,526,337 to Gardner (hereinafter Gardner) under 35 U.S.C. § 103.

Gardner teaches a ground-based system for taking control of and remotely flying an aircraft.

First, combining the aircraft installed collision protection system of Le Tallec with a ground based control system and it's related data links for taking control of the aircraft significantly exceeds the scope of the Le Tallec taught invention. More specifically, the combination is not a modification of the Le Tallec taught invention but rather a complete addition of a new capability to the Le Tallec combination. Put another way, nothing in Le Tallec is modified, rather a second system is added or connected to the Le Tallec based system.

Second, a critical step in analyzing the patentability of claims pursuant to 35 U.S.C. § 103 is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. See In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614,1617 (Fed. Cir. 1999). Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against

its teacher." Id. (quoting W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983)).

Most if not all inventions arise from a combination of old elements. See In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453,1457 (Fed. Cir. 1998). Thus, every element of a claimed invention may often be found in the prior art. See id. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. See id. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the appellant. See In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 163.5, 1637 (Fed. Cir. 1998); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125,1127 (Fed. Cir. 1984).

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. See Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole,

rather than expressly stated in the references. See WMS Gaming, Inc. v. International Game Tech., 184 F.3d 1339, 1355, 51 USPQ2d 1385, 1397 (Fed. Cir. 1999). The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981) (and cases cited therein). Whether the examiner relies on an express or an implicit showing, the examiner must provide particular findings related thereto. See Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617. Broad conclusory statements standing alone are not "evidence." Id. When an examiner relies on general knowledge to negate patentability, that knowledge must be articulated and placed on the record. See In re Lee, 277 F.3d 1338, 1342-45, 61 USPQ2d 1430, 1433-35 (Fed. Cir. 2002).

Upon evaluation of the examiner's comments, it is respectfully believed that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims. More specifically, the two systems may be concerned with safety but are so different and unique neither reference suggest or hints at the combination. The Examiner states an inherency type argument that because both systems are safety related they

are combinable. In other words, the Examiner is believed to be saying that any two safety related systems are combinable because they both relate to safety. We respectfully disagree as the two system teach separate and unique safety features and accordingly, request the Examiner to withdraw the rejection.

In item 10 on pages 5 and 6 of the above-identified Office Action, claims 11-12 have been rejected as being obvious over Le Tallec in view of U.S. Patent No. 6,392,692 to Monroe (hereinafter Monroe) under 35 U.S.C. § 103.

Applicants respectfully state that the same arguments in regards to item 9 apply equally well here and the combination of a small on aircraft alerting system with a ground-based security monitoring are unrelated.

Claims 20-21 have been added which recite using either a satellite network or an Internet protocol network for transmitting the data. Support for these claims is found on page 34, lines 16-26 of the specification of the instant application and as shown in Figs. 1 and 4. Please find enclosed a credit card authorization in the amount of \$25.00 for the claim in excess of 20.

Appi. No. 10/814,310  
Amdt. Dated September 29, 2005  
Reply to Office Action of June 6, 2005

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claim 1.

In view of the foregoing, reconsideration and allowance of claims 1-21 are solicited.

Petition for extension is herewith made. The extension fee for response within a period of one month pursuant to Section 1.136(a) in the amount of \$60.00 in accordance with Section 1.17 is enclosed herewith.

If an extension of time is required, petition for extension is herewith made. Any extension fee associated therewith should be charged to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner

Appl. No. 10/814,310  
Amdt. Dated September 29, 2005  
Reply to Office Action of June 6, 2005

and Greenberg, P.A., No. 12-1099.

Respectfully submitted,



---

For Applicants

REL:cgm  
September 29, 2005  
Lerner and Greenberg, P.A.  
P.O. Box 2480  
Hollywood, Florida 33022-2480  
Tel.: (954) 925-1100  
Fax: (954) 925-1101